

RECEIVED

Before the
FEDERAL COMMUNICATIONS COMMISSION AUG 12 1996
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of:)
)
Advanced Television Systems)
and Their Impact Upon the)
Existing Television Broadcast)
Service)

MM Docket No. 87-268

DOCKET FILE COPY ORIGINAL

To: The Commission

**REPLY COMMENTS OF THE
CITIZENS FOR HDTV COALITION
ON THE FIFTH FURTHER NOTICE OF PROPOSED RULEMAKING**

Summary

The Citizens for HDTV Coalition, whose members are unions, consumer and senior citizens groups, manufacturers, retailers, and trade press, listed at the end of these Reply Comments, wishes to submit these observations and responses regarding comments filed by other parties ("commenters") in response to the Commission's Fifth Notice of Proposed Rule Making ("NPRM"). That NPRM addressed the Commission's proposed adoption of the full ATSC Digital Television Standard (the "Standard") and mandate that digital broadcast licensees use this single transmission Standard.

In its original comments, submitted July 11, 1996, the Coalition congratulated the Commission for its thorough review of the issues involved; concurred with its evaluation of the public interest bases for these

No. of Copies rec'd
LTC-1006

Q-11

actions; and, agreed with its conclusions and proposed actions in support of the Nation's projected shift to all-digital television ("DTV") broadcasting, including high definition television ("HDTV").

In this submission, the Coalition urges the Commission to:

- Dismiss the arguments suggesting that the FCC should not adopt the ATSC Standard or even approve any standard. These arguments are based on unrelated situations, which, in fact, are not in any way analogous to the proposed implementation of DTV broadcasting and the conditions for replacing today's ubiquitous over-the-air television.
- Reject the proposals to change the ATSC Standard, or to approve an 'alternative' technical approach, which was just submitted. The issues embodied in the proposed changes and the alternative approach were vetted by and through the Advisory Committee, with the DTV competitors and the ATSC, and these elements were not included in the Standard for reasons clearly described in the Advisory Committee's record, on whose work the Commission can and should rely.

The basic purposes of the ATSC Standard are to support the transition of broadcast television to better and higher levels of service and technical quality, and to support the introduction of new video, information, and data services made possible by the shift to digital broadcasting. For these purposes, the Coalition believes that the record provided in the excellent and thorough work of the FCC's Advisory Committee on Advanced Television Service ("Advisory Committee"), and in the submissions of the vast majority of commenters on the NPRM, clearly and irrefutably supports the Commission's proposed adoption and mandated use of the Standard by DTV licensees.

Therefore, the Coalition observes again that, as proposed in its NPRM, the Commission *has it right*: now is *the right time*, the ATSC Standard is *the right Standard*, and a speedy, consumer-friendly transition to DTV broadcasting, including HDTV, is *the right reason* to adopt and mandate exclusive use of the Standard in the public interest.

The FCC Should Adopt the ATSC Standard and Mandate Its Exclusive Use

The Coalition believes that the need for the Commission's adoption and mandating use of the Standard were amply demonstrated by the vast majority of commenters on the NPRM. As in the Coalition's submission, these commenters strongly documented the national importance and unique nature of America's 'open' broadcasting system, which is very distinct from the models offered by others of 'closed' communications systems which may rely on 'voluntary' and/or 'proprietary' standards.

In addition, these commenters made a compelling case for such adoption and mandate in light of the public's interest in a speedy, consumer-friendly transition. This indisputable case was based on four things: 1) the certainty required by both consumers and suppliers in the huge broadcast chain to launch, sustain, and complete the process of replacing today's highly competitive nation-wide broadcast system; 2) the improvement of and competitive opportunity for over-the-air 'television' services; 3) the designed-in flexibility and expandable nature of the Standard, which garnered the

unanimous support of the FCC's all-industry Advisory Committee; and, 4) the more efficient use of the radio spectrum based on the DTV Standard and the earliest possible recapture for additional uses of significant portions of spectrum now allocated to broadcast television because of the requirements of today's analog technology.

Those who suggest that no FCC-adopted standard is needed appear to be either unaware of the above requirements and goals, or, frankly, interested in stymying the transition of broadcasting, at this time or forever, to DTV from a competitive perspective—or perhaps both. The Coalition does not include 'broadcasters' among its members; but, it is deeply committed to the proposition that, through DTV, 'broadcasting' as a medium should have a chance to continue to provide free, over-the-air television to all Americans, and to provide real competition to other media in quality, services and cost.

We believe that only the timely shift to DTV in broadcasting will provide this opportunity; and, we believe that, in light of the circumstances and public interest goals articulated by the Commission in its NPRM, and confirmed by the vast majority of commenters, this shift will only be accomplished by the FCC's adoption and mandating use of the Standard.

The ATSC Standard Should Be Adopted in Full

Some commenters propose that certain changes, restrictions and prohibitions should be made by the FCC to the ATSC Standard. The Coalition

disagrees and reaffirms its belief that the Standard should be adopted in full, as recommended unanimously by the Advisory Committee.

A review of these commenters' submissions shows that there are *no new arguments* for the proposals—whether they are issues of aspect ratio, scanning format, display refresh rate, or data durability. Each of these matters was thoroughly vetted by the Advisory Committee's Technical Subgroup and its various Working Parties and Task Forces, and through the competitors paper and hardware submissions, and the Advanced Television Systems Committee.

All parties represented in these commenters' submissions had full opportunity to participate; some availed themselves of it, others chose not to do so. After the proper, public, exhaustive, and timely examination of such proposals by the Advisory Committee, these proposals—most now resubmitted to the Commission—were not included in the Standard. The reasons for the elements which are in the Standard, and the reasons for not including these various proposals, are all clearly contained and explained in the record of the Advisory Committee. Individual members of the Coalition plan to file Reply Comments recapitulating the detailed technical and operational considerations, plus the various industries' interests and concerns, which were taken into account in developing both the *digital* Grand Alliance HDTV System and the related ATSC Standard. But we believe the Commission will agree, upon review of these detailed filings, that due

consideration and proper weight were given to each of these matters.

Therefore, the Coalition believes that the Commission can and should rely on the work of its Advisory Committee, whose voting membership was appointed by the Commission, and whose scope, process, and schedule were at all times provided, amended, and overseen by the Commission, from its 1987 inception through its conclusion in 1995. The Commission should not now change or reject elements of the Standard recommended unanimously by its Advisory Committee.

The 'Alternative Approach' Should be Rejected

The 'alternative approach' just submitted to the Commission(by DemoGraFX), and supported by some other commenters, is claimed to be superior technically, less expensive for consumers, and likely to speed the 'convergence' of television and computing. In fact, it is just the *opposite* on all three counts.

First, the proposed 'system' is both incomplete and largely unproven. Detailed analyses and comparisons of this approach will be submitted by members of the Coalition. But, in brief, it posits a 'base layer' to be followed by yet-to-be-established additional layers, perhaps eventually even HDTV—all declared, none tested independently. Further, this approach requires sending so much 'software' to tell receivers how to decode the content being

transmitted, that it wastes a great deal of the capacity of the signal on 'overhead' alone. Reportedly, this is the reason why such notions were rejected by the MPEG Committees reviewing them over recent years.

By contrast, the ATSC Standard provides now, at the outset, by more efficient means which may still be enhanced, the framework capable of permitting both SDTV *and* HDTV, as well as other purpose-designed services. Unlike the alternative, the ATSC Standard does not undercut the very efficiency sought from DTV in the fixed, six megahertz channel allocated for broadcasting. And this is the reason why the Advisory Committee insisted that the Grand Alliance conform to MPEG coding and compression forms, which the alternative violates.

Second, this alternative is considerably more complex, and, because it depends on future, still-undefined 'layers', it will invariably be more expensive for consumers. Again, individual Coalition members will provide detailed cost figures, from early in DTV implementation to later years, comparing the ATSC Standard to this alternative approach. The Coalition itself, however, wishes to observe again for the Commission that it is the combination of service options *already in the ATSC Standard*, including HDTV, all of which will be available for implementation *at the outset*, that will appeal to consumers and encourage them to make the switch, based on their own cost-of-entry decisions grounded in an understanding of what all the options are over time. The impact on consumer spending and choice is

explained more fully below.

Third, waiting to convert this alternative's simulations into real-time working hardware, to correct and/or improve the first implementation, to gather the resources to study and then to test, evaluate, and likely retest it, will halt the implementation of *any* digital broadcasting, including new computer-related services, for many years to come. This would further retard broadcasting's move to DTV and, in turn, undercut its competitive position vis-a-vis other media which are already implementing all-digital transmission. It would *withhold* real choice and new services from the public. As suggested above, this prospect is and should be a frightening and unacceptable one to anyone committed to the concept that free over-the-air television should have the chance to compete in the future with other distribution media.

Nevertheless, when all is said and done, this alternative is *but one* personal, or privately conceived, alternative. If the Commission were to reopen consideration of alternatives—which the Coalition strongly opposes—then there certainly would be others, as there were during the Advisory Committee process. And, just as during that process, with the best efforts and very considerable all-private resources of all parties involved, it would take considerable time to convene, construct, coordinate, and conduct a proper new testing and evaluation process. Invariably, this process would take years; and its conclusion might well be, based on evaluations of this one

proposed alternative, that the alternatives are no better than the ATSC Standard.

It should also be recalled that the possibility of alternatives, further developments and advances, and the importance of fair and open competition were *all considered and properly addressed* in the Advisory Committee's charter from the Commission, its operation with Commission participation and under Commission oversight, and its regular, public interim reporting to the Commission, not to mention its open and accessible meetings. Indeed the Commission took the position early on, as a means to ensure both speed and fairness, that all systems submitted had to be tested and that the Commission would not act on a standard until such testing was completed.

Indeed, as the Advisory Committee and NPRM records already fully reveal, the ATSC Standard was developed as a *flexible base* in anticipation of further advances and improvements, but knowing that at least *proven framework* was needed for moving ahead at all with DTV broadcasting.

The Coalition respectfully submits that *this is the time to move forward*, and that to do otherwise is both irresponsible, in light of the stakes for American consumers, workers, and broadcasting, and unreasonable, given the nature of the alternative offered and the certainty and effectiveness of what the ATSC Standard offers now and in the future.

The ATSC Standard is Better in Consumer Cost and Options

The ATSC Standard can and does support a full range of service, quality and price options to users and consumers *from the outset*, contrary to the views or claims submitted by some in their comments on the NPRM. For this reason, the ATSC Standard permits service providers and consumers to determine now the level at which they will chose to enter the DTV marketplace.

In contrast, the alternative proposal, which is not fully defined above its one SDTV 'base layer' invariably means that, over time, as futher higher levels are established, consumers will be required to buy again, and perhaps again, in order to move up the quality scale to HDTV. While this is not an unknown phenomenon in marketing and corporate positioning, for example, in the realme of computer and software makers, it is hardly consumer-friendly. By comparison to the ATSC Standard, which provides all choices now and whose highest and most complex implmentation is fully proven—without adding complexity and cost in receivers where it is not needed or sought by a consumer—the alternative is simply anti-consumer.

Several members of the Coalition, and we expect others, will specifically address the costs of ATSC Standard-compliant equipment to users (e.g. for professional production and transmission) and to consumers (e.g. for home, school, workplace, entertainment halls, meeting centers, etc.), *versus* those provided by others for the alternative approach. We urge the

Commission to study these details and compare them to any and all submitted by other parties claiming to have cheaper or more cost-effective solutions.

The Coalition does wish to cite one example, however, which highlights why consumer access to DTV, even during the early roll-out of DTV, will be affordable, and why—in contrast to the claims for the alternative—the framework of the Standard does *not* burden all consumers with either unnecessary cost or unsought complexity. Using the ATSC Standard, consumer receivers for DTV broadcasting will range in price from inexpensive, with fewer features and lower quality displays, to more expensive, with maximum features and highest possible quality displays capable of full HDTV. Contrary to the claims of some, the ATSC Standard broadcast signal does *not* have to be fully decoded by the least expensive receiver in order for that receiver to get and display all it was built to handle. At least one manufacturer (Hitachi) has developed such a receiver, which was reviewed by the Advisory Committee's Technical Subgroup and has been publicly demonstrated for over eighteen months. In effect, this receiver is selecting out and decoding parts of the ATSC digital signal it receives, thereby reducing the costs of the memory and processing electronics in this receiver consistent with the quality of the display—in this case a standard definition ("SDTV") display, which costs less than an HDTV display.

While manufacturer members of the Coalition plan to offer a range of

receiver products so that all consumers have *at least* the option for this kind of early, lower cost access to the content of new DTV signals on new DTV sets, manufacturers are also expected to compete in providing converter boxes—with this or similar technology—so that consumers who do not wish now to purchase a new TV can also get the content of the DTV signals on their current set, albeit displayed only at the resolution for which that set was built.

At the same time, however, and unlike the still-emerging notion of the alternative proposal, the ATSC Standard also permits manufacturers to meet the demand *now* for features and quality all the way up to real HDTV. In light of consumer trends over the past decade toward larger screen TVs, and higher quality and resolution displays in both televisions and computers, it might be expected that consumer demand for HDTV would be strong, at appropriate price points. Also, as the Coalition described in its original comments, the two companies who make TV sets in the United States and who are the largest suppliers of such sets with the majority of the U.S. market, have already committed to make their HDTV receivers here in the United States, using tens of thousands of U.S. workers. Appendix I provides a recent letter from the affected trade unions describing this and related factors.

While full HDTV quality certainly will be the most expensive end of the range of new DTV receivers in the earliest years of transition, many studies in the Advisory Committee and FCC record provide projections of the path for cost reduction with the growth of demand, manufacturing volume,

and competition over time. In addition, some manufacturers have submitted key findings of their internal market studies which support their expectations for HDTV sales, and which will propel their investments to make such receivers. Indeed, the faster the penetration of high-resolution displays in the consumer television marketplace, it may be inferred that the faster the price of high-resolution displays for computing, graphics, printing, military, and other applications could fall.

To be sure, as the Coalition stated in its earlier filing, manufacturers are understandably reluctant to widely publicize DTV and HDTV before the service or the products are available. Recently, however, the Consumer Electronics Manufacturers Association ("CEMA"), in conjunction with a Zenith Electronics HDTV demonstration at the National Council of Senior Citizens ("NCSC") Senior Citizens Expo '96, conducted a survey of attendees at the NCSC Annual Convention. The results of that survey give further evidence of the interest of many seniors, like other Americans in all stages and walks of life, who may also highly value high-quality television and the new services promised by DTV transmission, including HDTV. A CEMA press release about that survey is attached as Appendix II.

In short, HDTV can and should be part of what is available through digital broadcasting from the outset, and only the ATSC Standard, already proposed by the Commission, permits it. Again, as the Coalition said in its original submission, HDTV is important for consumer choice, for

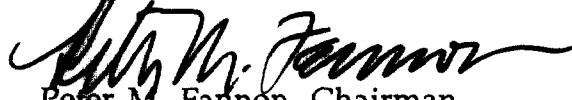
broadcasters competitive poistion, for helping encourage the speedy take-up of DTV by consumers, and for American jobs at U.S. manufacturing plants where commitments to make HDTV receivers have already been made.

Conclusion

The Citizens for HDTV Coalition appreciates the care with which the Commission evaluated the history, circumstances, and prospects for DTV in making its proposals in the NPRM. The results will, indeed, be far-reaching in both effect and time, as this matter deals with a key communications medium and services of great importance to the well-being of Americans and our Nation.

The Coalition believes that, upon review of the submissions in the NPRM, there is no reason for the Commission to change its findings. Therefore, the Coalition urges again that the Commission adopt the ATSC Standard in full and mandate its exclusive use by DTV licensees.

Respectfully submitted,
CITIZENS FOR HDTV COALITION



Peter M. Farnon, Chairman
1750 K Street, N.W., Suite 800
Washington, D.C. 20006
Tel: 202/429-7371, Fax: 202/828-7529

August 12, 1996

Appendices I & II

Members of Citizens for HDTV Coalition

Communications Workers of America/National Association of Broadcast
Employees and Technicians, AFL-CIO
Consumer Electronics Manufacturers Association
Digital Multimedia Compression, Inc.
digital HDTV Grand Alliance
Electronic Representatives Association
Electronic Industries Association's Advanced Television Committee
HDTV Newsletter
Home Recording Rights Coalition
Home Theater Magazine
International Brotherhood of Electrical Workers, AFL-CIO
International Union of Electronic, Electrical, Salaried, Machine and
Furniture Workers, AFL-CIO
Matsushita Electric Corporation of America
National Consumers League
National Council of Senior Citizens
North American Retail Dealers Association
Professional AudioVideo Retailers Association
Widescreen Review Magazine

August 9, 1996

**Mr. Greg Simon
Chief Domestic Policy Advisor
Office of Vice President Gore/Room 286
Old Executive Office Building
Washington, D.C.**

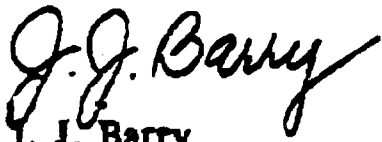
Dear Mr. Simon:

The undersigned unions wish to express strong support for the HDTV transmission standard as proposed by the Grand Alliance to the Federal Communications Commission. We believe that it is in the best interest of the United States to adopt this standard as soon as possible.

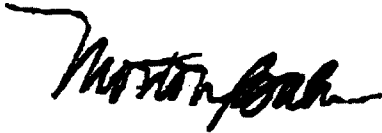
The major television manufacturers, RCA & Philips have pledged in writing to manufacture HDTV receivers in the U.S. if a transmission standard is adopted. We challenge the computer industry, which manufacture primarily in low-wage, non union countries in the Far East, to make a similar pledge

Adoption of a standard will mean the preservation of the thirty thousand manufacturing jobs of our members as well as the creation of thousands of high-paying, high-skilled jobs in the manufacturing and broadcast industries in America. It will also mean that American industry will retain its fragile competitive lead in digital video technology. We look forward to discussing this matter with you at any time.

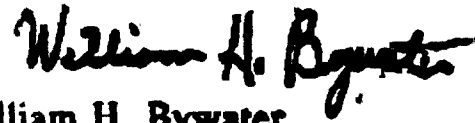
Sincerely yours,



J. J. Barry
International President
International Brotherhood of
Electrical Workers (IBEW)



Morton Bahr
President
Communications Workers
of America/National Association
of Broadcast Employees and
Technicians (CWA/NABET)



William H. Bywater
International Union President
International Union of Electronic,
Electrical, Salaried, Machine and
Furniture Workers, (IUE)



Jack Golodner
President
AFL-CIO Department For
Professional Employees (DPE)

FOR IMMEDIATE RELEASE

Contact: Cynthia Upson
tel: (703) 907-7674
or
Lisa Fasold
tel: (703) 907-7669
email: lfasold@cia.org
<http://www.cia.org/cema>

SENIOR CITIZENS WANT THEIR HDTV

Arlington, VA, July 11, 1996 -- At the Senior Citizens' Expo '96 held by the National Council of Senior Citizens in Chicago June 29-July 1, seniors citizens came out overwhelmingly in favor of HDTV. During the Expo, attendees could preview the Digital Grand Alliance's HDTV system, and 100 senior viewers were then personally interviewed on site by the Consumer Electronics Manufacturers Association (CEMA) on what they thought about the digital system.

Senior citizens surveyed were willing to spend \$1,000 to \$2,000 for a HDTV set. Eighty-six percent were interested in buying a HDTV set, and of those interested, 31 percent would spend \$1,500 or more, and 22 percent would spend between \$1,000 to \$1,500.

Picture clarity was the number one selling point for seniors with 75 percent saying that was what they liked best about HDTV. Ninety percent of those surveyed felt the picture quality of HDTV was "much better" than their existing sets. Seventy-seven percent also considered the sound quality of HDTV to be "much better" than their existing sets.

"HDTV brings the digital picture quality and sound consumers have begun to expect from

- more -

SENIOR CITIZENS WANT THEIR HDTV/2

their other consumer electronics products. Senior citizens are no exception to this rule and demand the same quality from their electronics products as other Americans," said Gary Shapiro, CEMA president. "The myth that seniors will not be able to afford HDTV or wish to spend their money on HDTV is outright false. Our survey showed that seniors were willing to spend up to four times the price of their existing TV for an HDTV set. Initial HDTV sets are expected to cost just a few hundred dollars more than today's similarly sized sets."

Current senior ownership habits show that they are prime prospects for HDTV. Of the seniors surveyed at the Expo, 53 percent currently own 25-inch or larger TVs, 97 percent connect their TVs to VCRs, and 70 percent subscribe to cable TV -- thus already investing in their television purchases.

The Consumer Electronics Manufacturers Association (CEMA) is a sector of the Electronic Industries Association (EIA), the 72-year-old Arlington, Virginia-based trade association representing all facets of electronics manufacturing. CEMA is the new name of EIA's Consumer Electronics Group (CEG). CEMA represents U.S. manufacturers of audio, video, consumer information, accessories, mobile electronics and multimedia products.

EDITORS: Please note that information regarding the Consumer Electronics Shows (CES®) and the consumer electronics industry is available via EIA/CEMA's World Wide Web Site, "The Consumer Electronics Cyberspace Companion" at <http://www.eia.org/cema>.

###